

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A suture anchor, comprising;
 - a bone engaging section formed along a bone engaging axis;
 - a bone engaging structure formed along said bone engaging section and defining a maximum diameter of the suture anchor;
 - a non-threaded suture engaging section extending from said bone engaging section to a terminal proximal end of the suture anchor and wherein an outermost annular surface of the suture engaging section defines a diameter less than or equal to said maximum diameter, such that said suture engaging section is able to be substantially disposed below an exterior surface of a boney structure after implantation;
 - a first eyelet and a second eyelet both formed as a completely surrounded bore in a proximal face of said suture engaging section, said first and second eyelets allowing a selected portion of a suture to pass through and extend from said suture engaging section generally along said bone engaging axis; and
 - a suture passage including first, second and third suture passage portions that are all defined entirely by said suture engaging section, [[that]] wherein said suture passage interconnects said first and second eyelets and is operable to allow a suture to enter and exit said suture engaging section from a single section such that the selected portion of the suture remains substantially within said maximum diameter, wherein said first suture passage portion extends from said first eyelet along a first axis, said second

suture passage portion extends through said outermost annular surface along a second axis that is generally perpendicular to said bone engaging axis and interconnects said first suture passage portion and a third suture passage portion, said third suture passage portion extending from said second eyelet along a third axis, wherein said first and third axes both diverge from each other from said terminal proximal end and both form exterior obtuse angles with said second axis.

2. (Original) The suture anchor of claim 1, wherein said bone engaging section and said suture engaging section are substantially integrally formed as a single unit.

3. (Original) The suture anchor of claim 2, wherein the material of said single unit is selected from a group including stainless steel, cobalt chromium alloys, bio-absorbable polymers, and combinations thereof.

4. (Original) The suture anchor of claim 1, wherein said bone engaging structure includes a thread formed along said bone engaging section, wherein a maximum diameter of said thread defines said maximum diameter of the suture anchor.

5. (Original) The suture anchor of claim 4, wherein said thread is formed only on said bone engaging section.

6. (Previously Presented) The suture anchor of claim 1, wherein:

said first and second eyelets are substantially exposed and accessible after implantation of the suture anchor.

7. (Previously Presented) The suture anchor of claim 1, wherein said first eyelet and said second eyelet are arranged relative to said suture passage such that a suture may be passed through said first eyelet through said passage and through said second eyelet and be held substantially within said suture engaging section.

8. (Original) The suture anchor of claim 7, wherein said suture passage allows a suture to be passed to an exterior of said suture engaging section at a point other than said first eyelet and said second eyelet.

9. (Original) The suture anchor of claim 1, wherein a suture passed through said suture passage is passed substantially only through said suture engaging section.

10-18. (Canceled)

19. (Currently Amended) A suture anchor to provide a fixation of a suture in a selected anatomical portion, comprising:

an anatomical engaging section having an anatomical engaging portion formed along an anatomical engaging axis; and

a non-threaded suture engaging section extending from said anatomical engaging section to a terminal proximal end of the suture anchor, said suture engaging section defining a radially outermost surface that is configured to be substantially disposed below an exterior surface of the selected anatomical portion after implantation;

wherein said suture engaging section defines a first suture eyelet and a second suture eyelet formed in a single terminal end wall of said suture engaging section ~~both of said suture eyelets being formed along an anatomical engaging axis;~~

wherein said first suture eyelet and said second suture eyelet are each operable to maintain the suture within a perimeter of said suture engaging section;

wherein said suture engaging section defines a suture holding passage interconnecting said first suture eyelet and said second suture eyelet to substantially hold a suture relative to said anatomical engaging section, said suture holding passage being formed entirely in said suture engaging section, said suture holding passage having first, second and third suture passage portions wherein said first suture passage portion extends from said first eyelet along a first axis, said second suture passage portion extends through said outermost annular surface along a second axis that is generally perpendicular to said bone engaging axis and interconnects said first suture passage portion and a third suture passage portion, said third suture passage portion extending from said second eyelet along a third axis, wherein said first and third axes

both diverge from each other from said terminal proximal end and both form exterior obtuse angles with said second axis;

wherein said suture engaging section is adapted to be positioned generally within a bore defined in said selected anatomical portion.

20. (Original) The suture anchor of claim 19, wherein said anatomical engaging section and said suture engaging section are generally formed as a single piece of a single material.

21-22. (Canceled).

23. (Previously Presented) The suture anchor of claim 19, wherein a suture is positionable through said first suture eyelet, said suture holding passage, and said second suture eyelet such that said suture is generally able to extend from said suture engaging section generally parallel and along an axis of said anatomical engaging section.

24. (Original) The suture anchor of claim 19, wherein said anatomical engaging section and said suture engaging section are adapted to be substantially received within the selected anatomical portion such that said suture engaging section is generally co-extensive with an exterior portion of said selected anatomical portion.

25-38. (Canceled).

39. (Previously Presented) The suture anchor of claim 1, wherein said suture engaging section is spaced a distance axially from said bone engaging section.

40. (Previously Presented) The suture anchor of claim 1, wherein said suture engaging section is positioned substantially within a boundary defined by said bone engaging section.

41-42. (Canceled).

43. (Previously Presented) The suture anchor of Claim 1, wherein at least a portion of said suture passage defines an enclosed bore extending substantially parallel to said bone engaging axis.

44. (Previously Presented) The suture anchor of Claim 19, wherein said suture holding passage includes an enclosed passage defined in said suture engaging section; wherein the suture is operable to be held completely within said suture engaging section via said suture holding passage.

45. (Previously Presented) The suture anchor of Claim 19, wherein said first suture eyelet and said second suture eyelet are both formed through one surface of said suture engaging section.

46. (Canceled)

47. (Currently Amended) A suture anchor system, comprising;
- a bone engaging portion formed along a bone engaging axis;
 - a bone engaging structure formed along said bone engaging portion and defining a maximum diameter;
 - a suture engaging portion extending from said bone engaging portion to an end surface of the suture anchor, said suture engaging portion defining a diameter less than or equal to said maximum diameter along the length of the suture engaging portion;
 - at least two eyelets formed in said end surface of said suture engaging portion to completely surround a suture and to allow a selected portion of the suture to pass through and extend from said suture engaging portion generally along said bone engaging axis;
 - a suture passage defined only by said suture engaging portion interconnecting said at least two eyelets, said suture passage having first, second and third suture passage portions wherein said first suture passage portion extends from said first eyelet along a first axis, said second suture passage portion extends through said outermost annular surface along a second axis that is generally perpendicular to said bone engaging axis and interconnects said first suture passage portion and a third suture passage portion, said third suture passage portion extending from said second eyelet along a third axis, wherein said first and third axes both diverge from each other from said terminal proximal end and both form exterior obtuse angles with said second axis; and

an access to a first portion of said suture passage extending through a side wall of said suture engaging portion configured to allow access to said suture passage through said side wall.

48. (Previously Presented) The suture anchor system of claim 47, wherein said bone engaging portion and said suture engaging portion are integrally formed as a single member.

49. (Previously Presented) The suture anchor system of claim 47, wherein said end surface is formed at an end of said suture engaging portion configured to extend away from said bone engaging portion.

50. (Canceled)

51. (Previously Presented) The suture anchor system of Claim 47, wherein said suture passage is configured to allow a suture to pass through one of said at least two eyelets, be positioned in said suture passage and pass through a second of said at least two eyelets.

52. (Canceled)

53. (Currently Amended) The suture anchor of claim 19, wherein ~~said anatomical-engaging section defines an axis and~~ said single terminal end wall is formed to intersect said anatomical engaging axis.

54. (Canceled)

55. (Previously Presented) The suture anchor of Claim 1, wherein said bore is substantially cylindrical.

56. (Previously Presented) The suture anchor of Claim 1, wherein said suture engaging section includes a surface; and
an access opening through said surface of said suture engaging section to allow access to said suture passage from an exterior of said suture engaging section through said access opening.

57. (Canceled)

58. (Previously Presented) The suture anchor of Claim 19, wherein said first suture eyelet and said second suture eyelet are each defined by a bore in an end surface of said suture engaging section, wherein said bore has a sidewall enclosing a complete perimeter of the bore.

59. (Previously Presented) The suture anchor of Claim 45, wherein said first suture eyelet and said second suture eyelet are each defined by a bore in the one end surface of said suture engaging section, wherein said bore has a sidewall enclosing a complete perimeter of said bore;

wherein said suture holding passage extends through said suture engaging section to interconnect said first suture eyelet and said second suture eyelet so that a suture is operable to pass through said first suture eyelet, said suture holding passage, and said second suture eyelet.

60. (Previously Presented) The suture anchor system of claim 47, wherein each of said at least two eyelets is defined by a bore in said end surface of said suture engaging portion, wherein said bore has a sidewall enclosing a complete perimeter of said bore.

61. (Previously Presented) The suture anchor system of claim 60,
wherein said suture engaging portion includes a first surface formed substantially transverse to said bone engaging axis;
wherein said at least two eyelets are both defined by said first surface.

62-64. (Canceled)

65. (Previously Presented) The suture anchor system of claim 47 wherein said suture engaging portion is non-threaded.